

Inventor: Sines
Serial No.

PATENT APPLICATION
Navy Case No. 78,465

ABSTRACT

The apparatus for cooling a high power electrical transformer and electrical motors uses thermally conductive material interleaved between the turn layers of a high power 5 transformer and iron core laminates to provide a low resistant thermal path to ambient. The strips direct excess heat from within the interior to protrusions outside of the windings (and core) where forced air or thermally conductive potting compound extracts the heat. This technique provides for a significant 10 reduction of weight and volume along with a substantial increase in the power density while operating at a modest elevated temperature above ambient.